

TKONNIKOV, S.P., LAVGENA, G.M.

Floristics study on the Kainiv Valley (Muksu River basin). Trudy  
Fam. biol. sta. 1:135-150 '63. (M.R. 17:10)

LADYGINA, G.M.; LITVINNOVA, N.P.

Study of the biomass in *Artemisia rhodantha* Rupr. in the Pamirs.  
Trudy Pam. biol. sta. 1:181-188 '63. (MIRA 17:10)

LADYNINA, I.N.; ANOSHIN, G.N.

Some characteristics of the distribution of rubidium, thallium, and  
bromine in the process of the formation of potassium salt deposits.  
Geol. i geofiz. no.3:64-74 '62. (MIRA 15:7)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.  
(Potassium salts)

*SECRET*  
GADYGINA, M. E. Ye

*SECRET*

The characteristics of plant cytochrome oxidase. B.  
Kubin and M. E. Ladvizius (A. N. Bush Inst. Biochem.  
Acad. Sci. USSR, Moscow) Backlin, 2, 847-50  
(1956).—Studies were made with apple, cabbage, beet, potato, and sugar-beet plants. The activity of barley cytochrome oxidase (I) was studied in sections in cell structures and in the centrifuged plant juice. Studies relating to the localization of I in barley leaves showed that the plastid and the cytoplasm of the leaves and roots possess cytochrome oxidase properties. In the early stages of the plant's development only 3.7% of I is found in the cytoplasm of the leaves; the greater part of I is found in the plastids. In the process of the plant's development, this relation changes and the I activity of the juice (cytoplasm) rises to 7.8% and, in 22-day-old plants, to 44.2%. According to the data given, the activity is reduced from 92.2 to 63.8%. Since with the growth of the plant the total I activity always increases, it appears that this rise (to approximately 12 times the original) is reflected in the increase in the cytoplasm only, since the level of activity in the plastids remained constant. Such a relation presents a different picture in the root of the barley plant. In the 16-day-old barley plants no I is found in the root cytoplasm, but I is accumulated in the plastids only. The disappearance of I from the root juice is accompanied by a reduction in the total I in plant root systems. I activity was found in the cell structures and in the juice of the roots of the sugar-beet and in the leaves of the cabbage plant, but their tissue sections (or some unexplained reason) were devoid of I activity. No I activity was found in cytoplasm of potato or apple. It was limited to the cell structures only. As the process of growth of the apples progressed, the activity of I in the apple pulp was gradually reduced, while it increased, according to the authors, in the cell structures. The study thus indicated that the sugar-beet, the cabbage, and the barley plants represent a class in which I is found in the juice and in the cell structures, while the apple and the potato represent another class of plants in which I is localized.

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*Rabin, B.A. and Badygina, N.G.*

In the structural elements of the protoplasm. Such a classification cannot be regarded as based on any absolute principles, however, since, as was shown, the intensity of localized I activity varies with the growth of the plant. It also appears that there exist two forms of I, one adsorbed by the plastids, the other present in the cytoplasm. Both forms seem to be affected in different ways and to different degrees by some undefined factors. A study of the effect of O<sub>2</sub> concentration on the activity of I failed to indicate any regularity or constancy and, as in the case above, appeared to be influenced by a variety of yet undefined factors. B. S. L. 2/2

*1. D. G. V. M. E. Ye.*

*Me*

Some peculiarities of plant cytochrome oxidase. B. A. Rubin and M. E. Ladygina. *Doklady Akad. Nauk S.S.R.* 100, 801-4 (1955). Cytochrome oxidase activity was studied in slices, cell structures, and juice of sugar beets and leaves and roots of barley sprouts. In the barley sprout the enzyme in the leaves is at 1st located in the plastids, but the cytoplasm acquires a greater and greater share with development of the plant being responsible for the total increase of activity with age. It appears that one form of the enzyme is definitely bound to the plastids, while another form is connected with the cytoplasm. The latter enzyme appears to have a greater affinity for O<sub>2</sub>. The enzyme from sugar beet is characterized by linear dependence of activity on partial pressure of O<sub>2</sub>; this is true of the enzyme derived from the tissue cell structures; the enzyme contained in the juice is most active at 10% O<sub>2</sub> concn. This again indicates 2 forms of the enzyme. G. M. Kozolupoff.

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COUNTRY : USSR  
CATEGORY :  
ABS. JOUR. : PZhBiol., №. 3 1959, №, 10090  
AUTHOR : Rubin, B. A., Ladygina, M. Ye.  
INST. : Academy of Sciences USSR  
TITLE : The Nature of the Effect of Streptomycin on the Development of Barley Sprouts  
ORIG. PUB. : Izv. AN SSSR. Ser. biol., 1957, № 3, 352-356  
ABSTRACT : Streptomycin does not destroy the formation of the plastid apparatus of the cell in barley; the leukoplasts of the leaves and roots of the plants treated with streptomycin are no different in size or shape from the controls; under its influence the diameter of the nuclei in the leaves decreases by 5-10% compared with the controls, and in the root cells, by 25-35%; in the cells of the coleophyl. The nucleolus under the influence of streptomycin, and later the whole nucleus also, become black, and on the 15th day of development the sprouts are  
Card: 1/2

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RUBIN, B.A.; LADYGINA, M.Ye.

Relation of ferroporphyrins to magnesium porphyrines [with summary in English]. Biokhimiia 22 no.6:984-990 N-D '57. (MIRA 11:2)

1. Institut biokhimi im. A.N.Bakha Akademii nauk SSSR, Moskva.  
(CHLOROPHYLL, metabolism,  
eff. of streptomycin (Rus))  
(STREPTOMYCIN, effects,  
on chlorophyll metab. (Rus))

LADYGINA, M. Ye.

AUTHORS:

Ladygina, M. Ye., and Rubin, B. A.

20-3-30/46

TITLE:

On the Effect Produced by the Toxin of Botrytis Cinerea  
upon the Cytochromoxidase of Cabbage (O deystvii toksina  
Botrytis cinerea na tsitokhromoksidazu kapusty).

PERIODICAL:

Doklady AN SSSR, 1957, Vol. 116, Nr 3, pp. 459-462 (USSR)

ABSTRACT:

The most important rôle of the chromoxitase in the respiration of vegetal organisms is generally acknowledged at present. The biological importance of this ferment, however, remains unclear in many respects. The distinctly marked lability and variability under the influence of various conditions and factors form one of the reasons of this lack of clearness. The cytochromoxidase is contained not only in young, but also in ripe tissues in which case its activity decreases with the aging of the organism. Amongst others it would be important to clarify how far the pathogenous micro-organisms act upon this activity. Moreover this question is of interest because the oxidation processes will play an important rôle in the phenomena of resistivity. The present treatise is devoted to the problem of displacements of activity in the action of cytochromoxitase which are

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On the Effect Produced by the Toxin of Botrytis Cinerea  
Upon the Cytochromoxidase of Cabbage

20-3-30/46

produced by infection. Two species of cabbage served as experimental object. Nr 1: - premature and unfit for storage, as well as the "Amager"-species which is late and resistant. The activity of the said ferment was determined by the Wartburg- apparatus for the absorption of oxygen and by the spectrophotometer SF-4 according to Webster. In the first tests the effect of toxin of the fungus,- referred to in the title, on various species of cabbage by means of the vacuum infiltration method was studied. In the case of the "Amager" species a very intensive increase of activity of the chromoxidase (3.5 times) has taken place, whereas species Nr 1 suffered a decrease of activity of almost 50 % after a 22 hours action of toxin. The influence of a direct infection was studied in the following tests. Variations of activity similar to the previous ones have taken place. This is caused by the different grade of resistance of the two species. Sound tissues of the cabbage plants of the two species show a rather similar activity of the cytochromoxidase. The differences occur as a direct consequence of the intervention

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On the Effect Produced by the Toxin of Botrytis Cinerea  
Upon the Cytochromoxidase of Cabbage

of the parasite. The resistivity was also expressed by the extent of the necrosis spots round the infected spot on the leafs of the two species: With species Nr 1 it was large, whereas in the case of "Amager" it was only as large as the infected spot itself. Towards the end of the storage period the activity of the chromoxidase decreases also in the case of "Amager". At that time the activity of the ferment of both species was equal. The causes for the character of reaction of one and the same fermentative system on species of plants of different resistivity remain unclear so far. Special tests with isolated and purified chromoxidase preparation (according to Millerd, a.o.) have shown that it does not exercise any inhibiting effect on the toxin. The above observations show that the influence of toxin on Botrytis cinerea is in first line due to the reaction of this factor on the protoplasm of the living cell. Similar conclusions could be drawn at the study of fungus Phytophthora infestans on potatoes. Consequently the influence of toxin on cytochromoxidase is not clear. It is determined by the chemical physiological peculiarities of the protoplast of

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On the Effect Produced by the Toxin of Botrytis Cinerea  
Upon the Cytochromoxidase of Cabbage

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which depends the grade of constancy and stability of the  
ferment against the products of the living activity of the  
fungus. There are 1 figures, 2 tables and 8 references,  
6 of which are Slavic.

ASSOCIATION: Institute of biochemistry imeni A.N. Bakh of the AN USSR  
(Institut biokhimii im. A. N. Bakha Akademii nauk SSSR)

PRESENTED: June 20, 1957, by A. I. Oparin, Academician

SUBMITTED: June 10, 1957

AVAILABLE: Library of Congress

Card 4/4

17(4), 30(1)

## AUTHORS:

Rubin, B. A., Ladzina, M. Ye.

SOY/10-124-5-58/62

## TITLE:

The Effect of Streptomycin on the Greening of Seedlings  
(Vliyanie streptomitsina na zelenenie semiatokov)

## PERIODICAL:

Doklady Akademii Nauk SSSR, 1959, Vol. 124, No. 5, pp. 1163-1166  
(USSR)

## ABSTRACT:

The suppression of greening by streptomycin is connected with rules governing the changes in the oxidation system (Refs 1, 2). Besides an activation of the total respiratory breathing the activity of cytochrome oxidase and polyphenol oxidase is suppressed. In order to determine the nature of the interrelation between the two above-mentioned groups of phenomena experiments were carried out in the course of which the inhibiting action of streptomycin was eliminated by ions of some metals (iron and manganese compounds, Refs 3-5). Since manganese in the nutrient does not reduce the absorption of streptomycin by the plant (Ref 7) and eliminates the inhibition of the growth of seedlings due to streptomycin (Refs 6, 7) it was assumed that manganese influences the oxidative processes. Barley seedlings of the Werner (Vilner) type and sunflowers of the Ryadov type (method according to Refs 1, 2) were used.

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The Effect of Streptomycin on the Greening of Seedlings SOV/20-124-5-58/62  
for investigations.  $MnSC_4 \cdot 4H_2O$  (55 mg/l) was used as manganese source, and K-Fe ethylene diamine tetraacetate (9.6 mg/l) as iron source. It may be seen from the data on table 1 that manganese and iron eliminates the inhibiting effect of streptomycin on the cytochrome oxidase. Iron showed an especially strong effect. Manganese acted in the same way on the polyphenol oxidase of the sunflower (Table 2). As may be seen from table 3 the synthesis power of chlorophyll of the plants was widely restored by  $Mn^{2+}$  and especially by  $Fe^{3+}$ . Thus, the interrelation between the displacements of the activity of oxidases forming under the action of streptomycin (which take part in electron transition) on the one hand, and the changes of the power of plant tissues to synthesize chlorophyll, on the other, was again confirmed. Moreover, it was confirmed that accordingly one of the members in the chain of chlorophyll synthesis is directly dependent on a normal functioning of the ferments of the concluding stage of oxidation. This may be the stage of the transformation of protochlorophyllide into protochlorophyll (affiliation of phytol to the porphyrin nucleus). In order to determine this fact the authors observed the fluorescence spectra of chlorophyll in living leaves (according to Ref 9. A. A. Krasnovskiy and

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The Effect of Streptomycin on the Greening of Seedlings SOV/2C-124-5-58/62

M. Bystrova assisted in the investigation). Barley seedlings served as experimental objects in the light as well as in the dark (Table 4). It may be assumed from the results that streptomycin delays the transformation of protochlorophyll into chlorophyll at a stage at which a compound with a maximum at 730 m $\mu$  is produced. This can be observed only in the light. Table 5 gives data on the changes in the pigment apparatus due to the action of streptomycin. There are 4 tables and 2 references, 7 of which are Soviet.

ASSOCIATION: Institut Biokhimiil im. A. N. Bakh Akademii Nauk SSSR (Institute of Biochemistry imen. A. N. Bakh of the Academy of Sciences, USSR)

PRESENTED: August 29, 1958, by A. J. Opatov, Akademik

SUBMITTED: August 26, 1958

Card 3/3

LADYGINA, M. Ye., Cand Biol Sci -- (diss) "Nature of the action of streptomycin on green plants." Moscow, 1960. 24 pp with graphs; (Moscow State Univ im Lomonosov, Inst of Biochemistry im A. N. Bakh of the Academy of Sciences USSR); 130 copies; price not given; (KL, 17-60, 147)

LADYGINA, M. YE., ARTSIKHOVSKAIA, YE. V., IVANCOVA, T. M., and  
AKSENOVA, V. A. (USSR)

"The Nature of the Toxic Action of *Botrytis cinerea*."

Report presented at the 5th International Biochemistry Congress,  
Moscow, 10-16 Aug 1961

RUBIN, B.A.; LADYGINA, M.Ye.

Effect of streptomycin on oxidative processes in barley sprouts.  
Biokhimiia 25 no.4:617-623 Jl-Ag '60. (MIRA 13:11)

1. Institute of Biochemistry, Academy of Sciences of the U.S.S.R.,  
Moscow. (STREPTOMYCIN) (PLANTS, EFFECT OF ANTIBIOTICS ON)  
(PLANTS—RESPIRATION)

RUBIN, B.A. (Moskva); LADYGINA, M.Ye. (Moskva); RUBIN, A.B. (Moskva)

Fifth International Biochemical Congress. Agrobiologija no.2:  
304-313 Mr-Ap '62. (MIRA 15:4)  
(Biochemistry—Congresses)

RUBIN, B.A.; LADIGHINA, M.E. [Ladygina, M.Ye.]

Nature of the action of some antibiotics upon higher plants.  
Analele biol 16 no.2:50-69 Mr-Ap '62.

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LADYGINA, M.Ye.; RUBIN, B.A.

Effect of streptomycin on the oxidation-reduction transformations  
of iron. Biokhimiia 27 no.2:322-326 Mr-Ap '62. (MIRA 15:8)

1. Institute of Biochemistry, Academy of Sciences of the U.S.S.R.,  
Moscow.

(PLANTS, EFFECT OF ANTIBIOTICS ON) (IRON)  
(OXIDATION-REDUCTION REACTION)

LADYGINA, M.Ye.

Toxic effect of the fraction of organic acids synthesized  
by *Botrytis cinerea*. Dokl. AN SSSR 147 no.2:499-501  
N '62. (MIRA 15:11)

1. Predstavлено академиком А.И. Опарином.  
(*Botrytis*)  
(Plants, Effect of poisons on)  
(Acids, Organic)

RUBIN, B.A.; LADYGINA, M.Ye.

Oxidative phosphorylation and the immunity of cabbage to  
Botrytis cinerea. Dokl. AN SSSR 153 no.4:957-959 D '63.  
(MIRA 17:1)

1. Institut biokhimii im. A.N. Bakha AN SSSR i Moskovskiy  
gosudarstvennyy universitet im. M.V. Lomonosova. Predstav-  
leno akademikom A.I. Oparinym.

RUBIN, B.A.; LADYGINA, M.Ye.

Mechanisms of the action of the toxin *Botrytis cinerea*.  
Agrobiologija no. 3:443-455 My-Je '64. (MIRA 17:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

AKSARINA, N.M., dotsent; LADYGINA, N.F.

Development of children's speech in kindergartens and children's homes. Pediatriia no.3:10-16 My-Je '54. (MLRA 8:1)

1. Iz kafedry pediatrii (zaveduyushchiy - professor G.N.Speranskiy)  
TSentral'nogo instituta usovershenstvovaniya vrachey Ministerstva  
zdravookhraneniya SSSR (direktor Lebedeva)  
(CHILDREN--LANGUAGE)

LADYGINA, N.F.

Some problems in child rearing in the second and third year of life.  
Vop. okh. mat. i det. 4 no. 4:77-81 Jl-Ag '59. (MIRA 12:12)

1. Iz kafedry pediatrii (rukovoditel' - prof. G.N. Speranskiy) Tsentral'nogo instituta usovershenstvovaniya vrachey (dir. - V.P. Lebedeva).  
(CHILDREN--CARE AND HYGIENE)

ASKARINA, N.M.; KISTIYAKOVSKAYA, M.Yu.; LADYGINA, N.F.; EYGES, N.R.;  
SHCHELOVANOV, N.M., prep., red.; ZAGIK, L.V., red.

[Development and upbringing of the child from birth to  
three years of age] Razvitiye i vospitanie rebenka ot rozh-  
deniya do trekh let. Moscow, Prosveshchenie, 1965. 182 p.  
(MIRA 18:12)

1. LADYGINA, N. M.

2. USSR (600)

4. Mice

7. Seasonal changes of reaction in domestic mice, *Mus Musculus L.*, under the influence of temperature. *Zool. zhur.* 31, No. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

KALABUKHOV, N. I. ; LADYGINA, N. M.

Mice

Emergence of ecological and physiological characteristics of mammals under the influence of external surroundings. Zool. zhur. 32, No. 2, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

LADYGINA, N. M.

"Seasonal and Geographic Changes in the Ecologicophysiological Characteristics of House-Mice in Relation to Present Conditions." Cand Biol Sci, Khar'kov State U imeni A. M. Gorkiy; Sci-Res Inst of Biology, Dept of Ecology, Khar'kov, 1954. (KL, No 1, Jan 55)

Survey of scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (13)  
SO: Sum. No 598, 29 Jul 55

USSR/Zooparasitology - Helminths.

G-2

Abs Jour : Ref Zhur - Biol., No 10, 1958, 43405

Author : Ladygina, N.M.

Inst : -

Title : Effect of Temperature and Humidity on Stem Nematodes of Potatoes and Onions.

Orig Pub : Uch. zap. Kharkovsk. un-t, 1957, 84, Tr. N.-i. in-ta biol. i biol. fak., 27, 101-114.

Abstract : It was established that under laboratory conditions the temperature limit for survival of *Ditylenchus destructor* and *D. allii* is 20-28° or less, and the limits at the high temperature and is 5-20 minutes ~ 47-52° (for potato stem nematode) and 50-55° (for onion stem nematode). Plant infection is possible at temperature from 1 to 37°; it occurs most intensely at 15-20° in *D. destructor* and at 7-17° in *D. allii*. The optimum temperature for reproduction and development of *D. destructor* is 20-27°.

Card 1/2

USSR / Zooparasitology. Parasitic Worms. Helminths of G  
Plants.

Abs Jour: Ref Zhur-Biol., No 6, 1959, 24225.

Author : Ladygina, N. M.  
Inst : Kharkov University; Scientific Research Institute  
of Biology and Biological Faculty.  
Title : Influence of the Oxygen Content in the External  
Environment on Stem Nematoda and Heteroderidae.

Orig Pub: Uch. zap. Khar'kovsk. un-t, 1957, 90, Tr. N.-i.  
in-ta biol. i biol. fak., 30, 257-261.

Abstract: Heterodera schachtii are the most sensitive to in-  
sufficiency of O<sub>2</sub>. During exposure for 1 hour,  
the slowing down of the motility of its larvae  
began from saturation of water with O<sub>2</sub> to 50%; on  
the other hand, for stem Nematoda of onion and po-  
tato, and invasion larvae of Heterodera radicicola

Card 1/2

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USSR / Zooparasitology. Parasitic Worms. Helminths of G  
Plants.

Abs Jour: Ref Zhur Biol., No 6, 1959, 24225.

Abstract: the slowing down of motility started with O<sub>2</sub> saturation of 7-6%. During 24-hour keeping, the inhibition of Heterodera schachtii began under at 75-70% of O<sub>2</sub> saturation, and, at 35%, the motility ceased. The inhibition of invasion larvae of Heterodera radicicola began at 15% of O<sub>2</sub> saturation. The stem Nematoda slowed down the motility at 17.7% O<sub>2</sub> saturation and ceased motility at 6%. -- Ye. S. Tulygina.

Card 2/2

LADYGINA, N.M. [Ladyhina, N.M.]

Effect of temperature on the intensity of respiration of certain phytohelminths. Dop.AN URSR no.2:228-231 '60. (MIRA 13:6)

1. Nauchno-issledovatel'skiy institut biologii Khar'kovskogo gosudarstvennogo universiteta. Predstavлено академиком АН USSR O.P. Markevichem [O.P. Markevychem].  
(RESPIRATION) (WORMS) (TEMPERATURE-PHYSIOLOGICAL EFFECT)

LADYGINA, N.M.

Some methods of ecological and physiological study of plant  
helminths. Sbor. rab. po nemat. sel'khoz. rast. no. 5:91-113  
(MIRA 17:5)  
'63.

1. Nauchno-issledovatel'skiy institut biologii Khar'kovskogo  
gosudarstvennogo universiteta, Khar'kov.

LADYGINA, N.M.

Effect of oat and sugar beet root emanations on the emergence  
of larvae from the cysts of oat and sugar beet nematodes.  
Nauch. dokl. vys. shkoly; biol. nauki no.4:17-19 '64. (MIRA 17:12)  
1. Rekomendovana Nauchno-issledovatel'skim institutom biologii  
Khar'kovskogo gosudarstvennogo universiteta im. A.M. Gor'kogo.

UTEGENOVA, K.D.; MEZINOVA, N.N.; LADYGINA, T.B.

More about the diagnosis and treatment of sterility. Zdrav. Kazakh.  
(MIRA 14:4)  
21 no. 4:27-30 '61.

1. Iz kafedry akusherstva-ginekologii lechebnogo fakul'teta (zav. -  
professor K.D. Utegenova) Kazakhskogo meditsinskogo instituta.  
(STERILITY)

LADYGINA, V.M.

Using physical therapy in a stomatological polyclinic. Stomatologiya  
37 no.1:73 Ja-F '58. (MIRA 11:3)

1. Iz stomatologicheskoy polikliniki No.15 imeni Mossoveta (glavnnyy  
vrach T.D.Sharova)  
(PHYSICAL THERAPY)

LADYGINA, V.V.

Exhibition of foreign geological maps in the Department of Geology.  
Vest. Mosk. un. Ser. 4: Geol. 20 no.3:89 My-Je '65.  
(MIRA 18:7)

YAKHNINA, N.A.; LADYGINA, V.Ye.; KABANOVA, Ye.A.; CHERNYSHEVA, T.F.

Enteropathogenic Escherichia coli in premature children. Vop. okh. mat. i det. 8 no.7-7-ii Ju '63. (MIRA 17-2)

1. Iz Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei (direktor - prof. P.A. Vershilova) AMN SSSR i otdeleniya nedono-shennykh i patologii nov-rozhdennykh detey (zav. Ye.Ch. Novikova) Instituta pediatrii (direktor - doksent M.Ya. Studenikin) AMN SSSR.

LADYGINA, Ye.Ya.

Comparative morphological and anatomical study of raw  
material from the medicinal species of digitalis. Apt.  
delo 14 no.6:32-42 N-D '65. (MIRA 18:12)

1. I Moskovskiy ordena Lenina meditsinskiy institut imeni  
I.M.Schenova. Submitted February 12, 1965.

Ladygina-Kots, N.N.

Category: USSR/General Division. General Problems. Philosophy.  
Methodology.

A-1

Abs Jour: Referat Zh. Biol., No 9, 10 May, 1957, 34832

Author : Ladygina-Kots, N. N.

Inst : not given

Title : Development of Image Forms in the Evolutionary Process of  
Organisms

Orig Pub: Vopr. Filosofii, 1956, No 4, 94-103

Abstract: An outline of the concrete data concerning the development of image forms in the phylogenetic series of the animal world in the light of the teachings of I. P. Pavlov. The data about invertebrates is stated briefly and that about vertebrates in more detail (more attention is given to mammals, particularly the lower and higher apes). He gives concrete expression to a series of philosophical propositions related to the materialistic interpretation of the origin of psychism, which ends in human consciousness as a qualitatively distinct form of image. In the exposition of the questions of the progressive development of psychism from the first irritabi-

Card : 1/3

-1-

Category: USSR/General Division. General Problems. Philosophy.  
Methodology.

A-1

Abs Jour: Referat Zh. Biol., No 9, 10 May 1957, 34832

lity to the complicated of unconditioned reflex and instinctive activity, attention is turned to the significance in this process of the internal and external conflicts arising in an organism in the process of changing its composition, or in the interaction of parts of the organism, conflicts between the organism and its environment, such as inner and interspecific reactions, etc. It is noted that in adding to the phylogenetically older forms of behavior (elementary irritability, unconditioned and conditioned relationships, analytic-synthetic activity, etc.), there arises in the primates new, more complicated and variated forms of behavior (tentative-exploring, processing, constructive and managing), complicated adaptive relationships, including the presence of thought. But only the primates possess the sense form of image, based on sensations, perceptions, representations and concrete graphic thought. The qualitatively original thinking of man operates with concepts and develops its aptitude for generalization

Card : 2/3

-2-

Category: USSR/General Division. General Problems. Philosophy.  
Methodology.

A-1

Abs Jour: Referat Zh. Biol., No 9, 10 May, 1957, 34832

and abstraction with the help of words. This qualitatively original behavior of man arises in the process of his formation, in the process of collective working activity, combining such specific attributes as work, speech, and consciousness.

Card : 3/3

-3-

LADYGINA-KOTS, Nadezhda Nikolayevna; KAGANOV, V.M., otv.red.;  
SHEMYAKIN, F.I., otv.red.; ROGINSKIY, Ya.Ya., otv.red.;  
GELLERSHTEYN, S.Q., red.izd-va; SHEVCHENKO, G.N., tekhn.red.

[Constructive and implement-using behavior in higher apes  
(chimpanzees)] Konstruktivnaya i orudiinaya deistel'nost'  
vyashikh obeg'ian (shimpanze). Moskva, Izd-vo Akad.nauk  
SSSR, 1959. 398 p.

(Chimpanzees)

(Animal intelligence)

(MIRA 13:1)

LADYGINA-KOTS, N.N. (Moskva)

Significance of Charles Darwin's works for comparative psychology.  
Vop. psichol. 8 no.4:125-132 J1-Ag '62. (MIRA 16:1)  
(Darwin, Charles Robert, 1809-1882)  
(Psychology, Comparative)

LADYGINA-KOTS, Nadezhda

New method of analysis of animal behavior under conditions of natural environment.

Report to be submitted for the 16th International Zoology Congress  
Washington, D.C., 20-27 Aug 63

LADY GINA-KOTS, Nadezhda Nikolayevna, doktor biol. nauk (1887-1963);  
SHOROKHOVA, Ye.V., očv. red.; MORAF, I.A., red.

[Prerequisites of human thinking; imitative construction by  
apes and children] Predposylki chelovecheskogo myshleniya;  
podrazhatel'noe konstruirovaniye obez'ianoi i det'mi. Moskva,  
Nauka, 1965. 108 p.  
(MIRA 18:5)

LADYGINA-KOTS, N.N.

Tool activity of apes and the problem of anthropogeny. Trudy  
MOIP. Otd. biol. 14:136-150 '64.  
(MIRA 13:4)

1. Gosudarstvennyy Darwinovskiy muzey, Moskva.

L 06575-67 EWT(m)/EWP(e)/EWF(t)/ETI IJP(c) AT/WH/JD/JG  
ACC NR: AP6029816 (A) SOURCE CODE: UR/0363/66/002/008/1429/1433

AUTHOR: Meyerson, G. A.; Rakitskaya, Ye. M.; Bulgakov, V. N.; Ladygo, A. S.

31  
B

ORG: Moscow Institute of Steel and Alloys (Moskovskiy institut stali i splavov)

TITLE: Investigation of the conditions for the preparation of niobium carbide and  
niobium carbonitride from niobium pentoxide

21 21 27

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 8, 1966, 1429-1433

TOPIC TAGS: niobium compound, carbide, nitride, nitrogen, ammonia

ABSTRACT: Preparation of NbC from Nb and NH<sub>3</sub> was studied at 1200°-1700°C for 1-8 hrs and the preparation of NbN<sub>0.3</sub>C<sub>0.7</sub> from NbO<sub>5</sub>, C, and N<sub>2</sub> and from NbO<sub>5</sub> and C in an NH<sub>3</sub> atmosphere was studied at 1000°-1700°C for 1-2 hrs. In general it was found that higher temperatures and longer reaction durations led to higher nitrogen content in the niobium carbide product. The experimental data as well as the thermodynamic calculations show that above 1620°C the NbC with less than 0.1% oxygen can be prepared from niobium oxide in an NH<sub>3</sub> atmosphere. The experimental data and the thermodynamic calculations also show that niobium carbonitride with as little as 0.01% oxygen content can be prepared from niobium oxide, carbon, and ammonia. In general, the formation of nitrides and carbonitrides in NH<sub>3</sub> atmosphere was faster than in the N<sub>2</sub> atmosphere. This is explained in terms of the high reactivity of nitrogen atoms readily generated

Card 1/2

UDC: 546.882'171.1+546.882'171.1'201

L 06575-67

ACC NR: AP6029816

o

on oxide surfaces by the dissociation of ammonia. Orig. art. has: 3 figures and 7 formulas.

SUB CODE: 07/ SUBM DATE: 13Oct65/ ORIG REF: 006/ OTH REF: 005

MS  
Card 2/2

FRIDRIKSEN, V.K., inzh.; SOKOLOVA, Z.N., inzh.; Prinimali uchastiye:  
SOKOLOV, Ye.V., inzh., BULAT, S.I., inzh.; TANIN, R.V., inzh.;  
KURBATOV, G.A., tekhnik; BURKOVA, T.D., tekhnik; LADYKA, M.A.,  
laborant

Rolls on a semicontinuous hot rolling strip mill. Stal' 22  
no.9:817-821 S '62. (MIRA 15:11)  
(Rolls (Iron mills))

LADYKA, Stanislaw

British shipping in the contemporary capitalist world.  
Gosp morska no.8:5-43 '63.

CHUDAKOV, A.Ye.; LADYKIN, V.I.; VATSEPIN, V.I., NESTEROVA, N.M.

Search of photons with an energy of  $10^{14}$  ev. from local  
sources of cosmic radio-frequency radiation. Trudy Fiz.  
inst. 26:118-141 '64.

(MERA IV:10)

LADYNIN, A.V.

Processing gravimetric observations by the approximative method  
with the introduction of a correction for the zero point based  
on the curvilinear law. Geofiz. razved. no.5:39-45 '61.

(MIRA 15:3)  
(Caspian Sea--Gravity prospecting) (Volga Delta--Gravity prospecting)

LADYNIN, A.V.

Some problems of the calculation of anomalies in the Bouguer reduction  
with varying density of topographic masses. Geol. i geofiz. no. 2:99-106  
'65. (MIRA 18:9)

1. Institut geologii i geofiziki Sibirs'kogo otdeleniya AN SSSR, Novosibirsk.

L 34654-66	EWT(1)	GW	
ACC NR:	AP6024782	SOURCE CODE:	UR/0210/66/000/003/0113/0120
AUTHOR:	<u>Ladynin, A. V.</u>		
ORG:	<u>Institute of Geology and Geophysics, Siberian Department, AN SSSR, Novosibirsk</u> <u>(Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR)</u>		
TITLE: <u>Gravitational anomalies in the Graaf-Hunter reduction and the isostatic state of the earth's crust in Transbaykalia</u>			
SOURCE:	<u>Geologiya i geofizika</u> , no. 3, 1966, 113-120		
TOPIC TAGS:	seismicity, tectonics, gravitation effect, earth gravity, geodesy		
ABSTRACT:	Graaf-Hunter anomalies were used in determining the degree of isostatic compensation in Transbaykalia and the Cisbaykalia areas. This paper describes their relationship to seismicity and some characteristics of tectonic development. It is noted that the territory of Transbaykalia for the most part is in equilibrium, but in Cisbaykalia is essentially uncompensated, a region of development of Cenozoic depressions. On the basis of different manifestations of Mesozoic and Cenozoic depressions in the Graaf-Hunter and Bouguer anomalies the authors have proposed a model of development of depressions and indicated the role of isostatic forces in this process. The author thanks K. V. Bogolepov, G. I. Karataev and E. E. Potiash for valuable remarks. Orig. art. has: 6 figures. JPR5: 36.795		
SUB CODE:	06	SUM DATE:	23Jun65
CRIG REF:	013	OTH REF:	003
Card 1/1	68	UDC:	550.831+550.341(571.55)
		0075	02610

LADYNIN, YEVGENIY NIKOLAYEVICH, master

Training by a working group. Prof.-tekhn. obr. 22 no. 183-4  
Ja '65. (MIRA 18-4)

1. Zavod "Krasnyy proletariy", Moskva.

LEVITIN, I.A.; POLOSKIN, Ye.N.; BYSTROVA, Z.L.; IADYNINA, E.F.; DORONINA, T.P.

Intensifying the production of resorcinol-formaldehyde solutions  
for latex impregnation compounds. Kauch.i rez. 21 no.1:47-49 Ja  
'62. (MIRA 15:1)

1. Moskovskiy shinnyy zavod.  
(Tire fabrics)

LADYNSKA, Irena  
SURNAME, Given Names

Country: Poland

Academic Degrees: not given

Affiliation: not given

Source: Warsaw, Przeglad Lekarski, No 6, 1961, pp 249-251.

Data: "The Therapeutic Waters of Rymanow Spa."

6PO 981643

LADINSKI, A.

etc etc

Exchange of technological thought among member countries  
of the Council for Mutual Economic Assistance. Przegl  
techn 85 no.9&7,8 1 Mr'64.

LADYNSKI, Andrzej

Past and present of the international clearing system of  
the Council of Mutual Economic Assistance. Przegl techn  
85 no. 13: 3, 5 29 Mr '64.

LADYNSKI, Andrzej

Eighteenth anniversary of the origin of the Socialist Federal  
Republic of Yugoslavia; equal and advantageous cooperation.  
Przegl. techn. 84 no.48:5, 8 l D '63.

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3, 15-1957-3-2771  
p 35 (USSR)

AUTHOR: Ladyshkina, T. Ye.

TITLE: Data on the Study of Diatomaceous Algae in the Quaternary Deposits of the Baltic Region (Materialy k izucheniu diatomovykh vodorosley chetvertichnykh otlozheniy Pribaltiki)

PERIODICAL: Uch. zap. LGU, 1955, Nr 191, pp 198-203

ABSTRACT: The Littorina diatom flora of Liyepaya is similar to that of the same age in Gdansk Bay (Bay of Danzig) and differs from the Littorina flora along the eastern shore of the Gulf of Bothnia by the great number of salt-water species. They differ markedly from diatoms of the same age in deposits in the Gulf of Finland, inasmuch as the assemblage from the Gulf of Finland completely lacks salt-water forms.

Card 1/1

E. D. Z.

VOSTRUKHINA, T.M.; LADYSHKINA, T.Ye.

Spore-pollen spectra and the diatom flora of glacial-lacustrine  
deposits of the southern part of the Kola Peninsula. Dokl.AN SSSR  
145 no.5:1107-1109 '62. (MIRA 15:8)

1. Predstavлено академиком V.N.Sukachevым.  
(Kola Peninsula--Geology, Stratigraphic)

ZHELUBOVSKAYA, K.V.; LADYSHKINA, T.Ye.

Results of palynological and diatomic analyses of  
Quaternary sediments in the northern part of Archangel  
Province. Sov.geol. 5 no.6:126-129 Je '62. (MIRA 15:11)  
(Archangel Province—Glaciology)

ZHELUBOVSKAYA, K.V.; LADYSHKINA, T.Ye.

Studying the late glacial history of the Baltic area on the basis  
of diatomic and palynologic investigations of a cross section of  
the Lakhta trough. Dokl. AN SSSR 146 no.6:1383-1385 0 '62.

(MIRA 15:10)

1. Predstavleno akademikom V.N. Sukachevym.  
(Lakhta region (Leningrad Province)---Paleobotany, Stratigraphic)

ZHELUBO<sup>SKAYA</sup>, K.V.; LADYSHKINA, T.Ye.

Post-glacial history of the Baltic region based on data of diatom  
and palynological studies of a section of the Lakhtinskiy trough.  
Dokl. AN SSSR 151 no.3:652-654 Jl '63. (MIRA 16:9)

1. Pyatoye geologicheskoye upravleniye Ministerstva geologii  
i okhrany nedor SSSR, Leningrad. Predstavлено akademikom V.N.  
Sukachevym.

(Lakhtinskiy region--Diatoms)  
(Lakhtinskiy region--Palynology)

VOSTRUKHINA, T.M.; LADYSHKINA, T.Ye.

New data on the study of Quaternary sediments in the Kem' region  
of Karelia. Dokl. AN SSSR 155 no. 3:559-561 Mr '64. (MIRA 17:5)

1. Gosudarstvennyy geologicheskiy komitet SSSR pri Vysshem Sovete  
narodnogo khozyaystva SSSR. Predstavлено akademikom V.N.Sukachevym.

LADYSHKINA, T.Ye.

Problem No.1 of the Yel'tza Sea in the Baltic Sea region; based  
on the data of diatom investigations. Dokl. AN SSSR 164 no.5:1122-  
1124 0 '65. (MIRA 18:10)

1. Submitted February 16, 1965.

LADYZHANSKIY, I.A.; MALTABAR, V.M., kand.sel'skokhoz.nauk; ULYANKIN, M.G.

Efficiency of the technological progress in the manufacture of  
brandy alcohol. Trudy MNIIIPP 4:124-133 '64.

(MIRA 18:1)

LADYZHANSKIY, I.A.; POPOVSKIY, V.G.; GASYUK, G.N.; DUL'NEVA, I.P.;  
ZELENSKAYA, M.I.

Economic efficiency of using the simplified technology in  
grape juice production. Trudy MNIIPP 5:91-96 '64.

(MIRA 19z1)

LADYZHENSKAYA, E. A., kand. med. nauk

Changes in the middle ear in tumors of the base of the brain.  
Vest. otorin. no.5:30-33 '61. (MIRA 14:12)

1. Iz kliniki bolezney ukha, nosa i gorla (zav. kafedroy - prof. K. A. Drennova) Tashkentskogo instituta usovershenstvovaniya vrachey i iz kliniki nervnykh bolezney (zav. kafedroy - prof. L. Ya. Shargorodskiy[deceased]) Tashkentskogo meditsinskogo instituta.

(BRAIN--TUMORS) (EAR--DISEASES)

LADYZHANSKAYA, E.A.

Paroxysmal vestibular syndromes as sequelae of malaria. Vest. oto-rin.  
17 no.6:50-53 N-D '55. (MIRA 9:2)

1. Iz kafedry bolezney ukha, gorla, i nosa (zav.--prof. K.A. Drennova)  
(MALARIA, complications,  
vestibular paroxysmal synd)  
(VESTIBULAR APPARATUS, diseases,  
paroxysmal synd. caused by malaria)

~~LADYZHENSKAYA, E.A.~~

LADYZHENSKAYA, E.A., assistant

Course of acute otitis media in influenza. Sbor. trud. Tashk. KEMP  
no.1:180-186 '56 (MIRA 11:3)  
(EAR--DISEASES) (INFLUENZA)

LADYZHENSKAYA, E.A.

Histomorphological changes in the auditory nerves in the  
comatose form of malaria. Izv.AN Uz.SSR.Ser.med. no.5:39-  
44 '58. (MIRA 12:5)

1. Tashkentskiy gosudarstvennyy institut usovershenstvovaniya  
vrachey. (ACOUSTIC NERVE) (MALARIA)

*Altair*  
LADYZHENSKAYA, E.A., Doc Med Sci — (diss) "Effect of the  
8th pair of nerves in malaria." Tashkent, 1959, 20 pp (Min  
of Health UkrSSR. Tashkent State Med Inst) 300 copies  
(KL, 33-59, 120)

- 57 -

LADYZHENSKAYA, E.A., kand.med.nauk (Tashkent)

Problem of treating tympanogenic labyrinthitis [with summary in English]. Vest.etc-rin. 21 no.1:103-108 Ja-F '59 (MIRA 12:1)

1. Iz kafedry bolezney ukha, gorla i nosa (zav. - prof. K.A. Drennova) Tashkentskogo instituta usovershenstvovaniya vrachey.  
(LABYRINTH (EAR))  
tympanogenic labyrinthitis, surg. (Rus))

LADYZHENSKAYA, E.A., kand.med.nauk

Hearing disorders and deafness in disorders of the mesencephalon.  
Vest.otorin. 22 no.6:27-32 '60. (MIRA 14:1)  
(BRAIN--DISEASES) (DEAFNESS)

LADYZHENSKAYA, E.A., doktor med.nauk

Diagnostic importance of spontaneous nystagmus in cerebellar  
abscesses. Vest. otorin. no.4:62-67 '62. (MIRA 16:3)

1. Iz kafedry bolezney ukha, gorla i nosa (zav. - prof. K.A.  
Drennova) Tashkentskogo instituta usovershenstvovaniya vrachey.  
(CEREBELLUM-ABSCESS) (NYSTAGMUS)

LADYZHENSKAYA, E.A., kand.med.nauk

Clinical aspects of lesions of the 8th pair of nerves in the comatose and precomatose forms of malaria. Med. zhur. Uzb. no.3:54-58 Mr. '60.  
(MLIA 15:2)

1. Iz kafedry bolezney ukha, gorla i nosa (zav. - prof. K.A.Drennova)  
Tashkentskogo gosudarstvennogo instituta usovershenstvovaniya vrachey.  
(ACOUSTIC NERVE) (MALARIA)

Ladyzhenskaya, F.M.

AUTHOR: Goncharov, I.M., Fudim, L.I., Ladyzhenskaya, F.M. and  
Ryabchikova, O.A., Engineers.

133-5-21/27

TITLE: Phosphatising and glazing of wire before drawing. (Fosfat-  
irovaniye i ostekleniye provolki pered volocheniyem.)

PERIODICAL: "Stal'" (Steel), 1957, pp. 464-465 No. 5, (U.S.S.R.)

ABSTRACT: Methods of phosphatising and glazing wire before drawing  
developed in the Magnitogorsk works (Magnitogorskiy Zavod) on  
the basis of experience of the Molotov Works in Leningrad  
(Leningradskiy Zavod im. Molotova) are described.

ASSOCIATION: Magnitogorsk Calibration Works (Magnitogorskiy  
Kalibrovochnyy Zavod)

AVAILABLE:

Card 1/1

LADYZHENSKAYA, I.V.

Climate classification in school geography; analysis of new standard  
textbooks. Geog. v shkole 21 no.3:26-33 My-Je '58. (MIRA 11:6)  
(Climatology)

LADYZHENSKAYA, F.M.; RYABCHIKOVA, O.A.; FUDIM, L.I.; CHETVERTKOVA, V.A.;  
LAPSHIN, L.Ya.

Phosphatizing in the cold upsetting of reinforcement elements.  
Stal' 21 no.5:471-474 My '61. (MIRA 14:4)

1. Nauchno-issledovatel'skiy institut metiznoy promyshlennosti  
i Magnitogorskiy kalibrovochnyy zavod.  
(Forging) (Phosphate coating)

S/133/61/000/012/006/006  
A054/A127

AUTHORS: Ladyzhenskaya, F.M.; Ryabchikova, O.A.; Fudim, L.I.; Chechetki-na, Zh.A.; Lapshin, L.Ya.

TITLE Preliminary parkerizing of wires prior to drawing on production lines

PERIODICAL: Stal', no. 12, 1961, 1,129 - 1,132

TEXT: Parkerizing contributes towards higher drawing speeds, reduces rejects and raises the service life of the wire. As only clean wire can be parkerized, tests were made with pickling and washing the wire prior to parkerizing. Scale can be quickly removed when pickling in a hot 18-% concentration of hydrochloric acid at 65 - 70°C, adding velosite as foaming agent (0.5 kg/m<sup>2</sup>) and pickling for 15 sec. When this pickling bath is used and the wire is washed thoroughly afterwards, no abrasion of the wire is necessary. Another effective bath composition is a 20-% solution of H<sub>2</sub>SO<sub>4</sub> at 75 - 80°C for 20 sec. After this treatment, however, abrasion of the wire can not be omitted. When preparing the monophosphate-zinc solution for the process, care must be taken to obtain a solution which has a sufficient acidity, without, however, having an ex-

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Preliminary parkerizing of wires prior to ....

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A054/A127

cess amount of free acidity, which would deteriorate the quality of coating. The best results were obtained by adding zinc nitrate (20 g/l) to the phosphate solution. This increases the general acidity of the solution from 13.8 to 25 and accelerates the process particularly for low concentrations and results in a phosphate coating three times thicker than the standard coating. When applying zinc phosphate with a concentration of 4 or 6% and adding zinc oxide and zinc nitrate, parkerizing is effected rapidly at 70 - 80°C, keeping the wire in the bath for 20 sec. The weight of coating will be about 3.5 g/m<sup>2</sup>. The addition of 100 g/l sodium nitrate also accelerates the process. Zinc oxide and zinc nitrate should be used in combination: the former to decrease the free acidity of the solution somewhat, while the latter is applied to raise the general acidity of the bath. In the continuous wire drawing process parkerizing is carried out after pickling in 18 - 20-% sulfuric acid with maximum 5% FeSO<sub>4</sub> at 70 - 80°C and washing in water. The phosphate bath should have an acidity of 35 - 60 and a free acidity of 3 - 6, a temperature of 70 - 80°C. A zinc-phosphate concentrate (heated to 70°C) containing NaNO<sub>3</sub> has to be added to the bath. The entire process is completed by washing in running water and dipping in a 2 - 3% soapy solution (at 50 - 60°C) or by liming. The last phase of the process is drying at 150 - 200°C. The wire prepared in this way is then fed

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Preliminary parkerizing of wires prior to ....

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A054/A127

into the drawing stand. It was found in practice that drawing rates of 900 m/min can be obtained by passing the wire twice through the phosphate bath (40 sec instead of 20). In the tests for wires 1.3 - 1.7 mm in diameter 4 kg/ton phosphoric acid and 0.83 kg/ton zinc were used. There are 4 figures, 3 tables and 9 references: 5 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-language publications read as follows: H.A. Holden, S.I. Scouse, Wire Industry, 1949, v. 16, no. 192; V.D. Smith, Wire and Wire Products, 1945, p.II, no. 2.

ASSOCIATIONS: NIIMETIZ i Magnitogorskiy kalibrovochnyy zavod (Magnitogorsk Grooving Plant)

Card 3/3

LADYZHENSKAYA, F.M., inzh.; YELISEYEVA, N.V., inzh.

Effect of copper and other coatings on the corrosion resistance  
of wire. Stal' 25 no.5:471-475 My '65.

(MIRA 3286)

1. Nauchno-issledovatel'skiy institut metiznoy promyshlennosti.

LADYZHENSKAYA, F.M.; NEFEDOVA, D.I.

New developments in research, Stal' 25 no.8:87i S '65. (MIRA 18:9)

3637081/62/000/005/091/112  
B160/B138

119700

AUTHORS: Ravikovich, A. M., Ladyzhenskaya, I. V.

TITLE: Anti-oxidants for lubricating oils based on reaction products of phosphorus pentasulfide and terpenes

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 531, abstract 5M232 (Sb. "Prisadki k maslам i toplivam", M., Gostoptekhizdat, 1961, 79 - 85)

TEXT: It has been found that  $P_2S_5$  reacts with terpenes in the presence of  $AlCl_3$  at a lower temperature ( $70 - 90^{\circ}C$ ) and with the formation of fewer high-molecular insoluble substances than in the usual method (without  $AlCl_3$ ). The reaction products which have been neutralized by metal bases have better stability, higher P and S content and better solubility in oil than those obtained by the normal method. They also give better thermooxidation stability to mineral oils in thin films. A new type of organo-phosphorus compound has been produced by reacting  $P_2S_5$  with a mixture of terpenes and alcohols in the presence of  $H_2SO_4$  as a catalyst (at the rate of 1 - 5% of

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42712  
S/081/62/000/020/025/040  
B168/B101

11.7700

AUTHORS: Goryacheva, V. I., Kalashnikov, V. P., Ladyzhenskaya, I. V.,  
Lyakhovich, R. S., Sidorenko, T. N., Shekhter, Yu. N.

TITLE: An additive for oils based on products of heat-contact  
cracking of kerosine

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1962, 450-451,  
abstract 20M203 (Novosti neft. i gaz. tekhn. Neftepererabotka  
i neftekhimiya, no. 3, 1962, 3-5)

TEXT: At the "Neftegaz" works in Moscow an antiwear sulfur additive  
(HT-103 [NG-103]) and an antioxydant additive containing sulfur and  
phosphorus (HT-105 [NG-105], -105a [NG-105a], HT-105b [NG-105b])  
for engine oils were developed from the products of heat-contact cracking  
of kerosine. Products from the cracking of paraffin, distillation  
residues and kerosine were used for synthesizing the sulfur additive; the  
130-250°C cracked kerosine fraction was found to be the best raw material  
for producing the additive. Sulfuration was carried out in an experimental  
unit by adding the cracked stock to melted sulfur (15% on cracked stock)  
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An additive for oils based on ...

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B168/B101

under intense agitation; the temperature was held at 135-150°C, and the reaction time was 2-3 hr. The resulting sulfurated product was held for 8 hr at 150-160°C after which it was washed in a column, at first with a solution of Na<sub>2</sub>S and then with NaOH. After passing the copper-plate test the product was charged into a vacuum column and the hydrocarbons which had not taken part in the reaction were distilled off from it at a residual pressure of 5-10 mm Hg; the product was subsequently taken to an ultracentrifuge. The yield of additive was 25-30% of the raw material. Comparative tests on the additive NG-103 showed that as regards antiwear properties it is not inferior to D3-5 (EZ-5), OT-1 (OT-1) or U3/9 (LZ<sup>6</sup>/9) which are made from scarce raw materials, and that it has advantages over them (cheap source material, simple production method, no unpleasant odor). The antioxydant additive was produced from a 75-250°C cracked kerosine fraction with a molecular weight of 198 and a Francis bromine number of 40. In order to produce a stable oil-soluble additive the olefinic hydrocarbons of the cracked stock were first polymerized in the presence of 2 wt.% AlCl<sub>3</sub> (on raw material) at 60°C. The mixture obtained

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X

An additive for oils based on ...

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was heated to 100°C and received gradual additions of  $P_2S_5$  (15 wt.% on raw material) with agitation. Upon completion of phosphosulfuration the temperature of the mixture was raised to 140°C and held there for 7-8 hr. The product was then treated with 5%  $H_2SO_4$  and washed with water. The hydrocarbons which had not undergone reaction were distilled off from the purified product at a pressure of 5-6 mm Hg. The acid additive (NG-105) was neutralized with CaO (NG-105b) or ZnO (NG-105a) and was centrifugalized. The additives so produced were dark brown in colour and had the usual odor of cracked stock; in a thin film they were transparent. The additive yield is 25% of the initial cracked stock. [Abstracter's note: Complete translation.

Card 3/3

X

1. LADYZHENSKAYA, K.I.
2. USSR (600)
4. Hepaticae
7. A second species of the genus Conocephalum Weber in the liverwort flora of the U.S.S.R., Bot.mat.Otd.spor.rast. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953. Unclassified.

1. LADYZHENSKAYA, K.I.
2. USSR (600)
4. Hepaticae
7. *Riccia frostii* Aust. in the hepatic flora of the U.S.S.R. Bot.mat.Otd.spor.rast. 8, 1952.
9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953. Unclassified.

LADYZHENSKAYA, K. I.

AERAMOVA, A. L.; LADYZHENSKAYA, K. I.; SAVICH-LYUBITSKAYA, L. I.; SAVICH, V. P.,  
professor, doktor biologicheskikh nauk, zasluzhennyy deyatel' nauki  
RSFSR, otvetstvennyy redaktor; VIKHREV, S. D., redaktor; AROHS, R. S.,  
tekhnicheskiy redaktor

[Cryptogamic flora of U.S.S.R.] Flora sporovykh rastenii SSSR.  
Moskva. Vol. 3. [Mosses] Listostebel'nye mkh. No. 2. [Andreaeales  
and Bryales (Tetraphidales, Polytrichales, Byxbaumiales, Schistostegales)]  
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(Mosses)

LADYZHENSKAYA, K. I. ; ZENKOVA, Ye. Ya.

Ecology of the genus *Mylia* Gray within the U.S.S.R. (Ad oecologiam  
generis *Mylia* Gray in URSS). Bot.mat.Otd.spor.rast. 10:231-240  
Ja '55. (MLRA 8:7)  
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Liverwort spores as a systematic characteristic exemplified by the  
genus *Fossembronia* Raddi. Bot. zhur. 40 no. 6: 853-857 N-D '55.

(MLRA 9:4)

l. Botanicheskiy institut imeni V.I. Komarova Akademii nauk SSSR,  
Leningrad.

(Hepaticae) (Spores)

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6,  
14-57-6-12508  
p 112 (USSR)

AUTHOR: Ladyzhenskaya, K. I.

TITLE: First Find of Fossombronia angulosa (Dicks) Raddi in  
the USSR [ (Pervaya nakhodka Fossombronia angulosa  
(Dicks) Raddi v predelakh SSSR) ]

PERIODICAL: Botan. materialy otd. sporovykh rast. Botan. in-t AN  
SSSR, 1956, Vol 11, pp 167-176

ABSTRACT: The article presents new data pertaining to a find of  
Fossombronia angulosa in the USSR. F. angulosa, the  
largest plant of this genus (15 mm to 30 mm long),  
forms more or less thick coverings or single indi-  
viduals which spread along the ground. A morphologi-  
cal description of the species is included. F.  
angulosa is the most mesoxerophytic species of the  
entire genus. This long-lived plant grows in the soil  
of the arid subtropical Caspian region, sometimes

Card 1/2

First Find of Fossombronia angulosa (Cont.)

14-57-6-12508

occurring among cliffs, in fissures, or in the earth layer which covers them, along roads and in the loose soil under fruit trees. It grows less abundantly over the seacoast belt which is not as suitable for xerophytes and is always associated with substrata free of other vegetation. It was observed to bear spores at the end of September. The specimens, collected in the latter half of August on the moist soils prevailing in the damp subtropical regions around the Black Sea, were heavily laden with spores. The plant grows in the shore areas of the Black and the Caspian Seas in the Caucasus, where it is associated with the bare southern slopes of low hills. Its habitat in the Caucasus is restricted to the coastal belt. The author describes the distribution of the plant in the USSR, in Europe, and throughout the world. F. dumortieri bears the greatest resemblance to F. angulosa. A table by which these two species can be distinguished from one another in the USSR is included, as is a map showing the world-wide distribution of F. angulosa.

Card 2/2

N. Ya. T.

LADYZHENSKAYA, K.I.; OBUKHOVA, V.M.

Genus *Riella* Mont. in the rice fields of the Kazakh S.S.R.  
Bot.mat.Otd.spor.rast. 11:176-182 Ja '56. (MLRA 9:11)  
(Kazakhstan--Hepaticae)